# PATENT COOPERATION TREATY

## **PCT**

REC'D 23 FEB 2006

PCT

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FR920030070/PCT	FOR FURTHER ACTIO	See Form PCT/IPEA/416			
International application No. PCT/EP2004/052907	International filing date (day/n 10.11.2004	nonth/year) Priority date (day/month/year) 27.11.2003			
International Patent Classification (IPC) of H04L29/06, H04L12/58	or national classification and IPC				
Applicant INTERNATIONAL BUSINESS MACHINES CORPORATION					
Authority under Article 35 and	Authority under Article 35 and transmitted to the applicant according to Article 36.				
	tal of 5 sheets, including this co	over sheet.			
3. This report is also accompanie	ed by ANNEXES, comprising:	halaf abaata aa fallowe:			
a. Sent to the applicant a	nd to the International Bureau) a	a total of Sneets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis of this repo and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goe beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
	r tables related thereto. In comic	ate type and number of electronic carrier(s)) , containing a outer readable form only, as indicated in the Supplemental the Administrative Instructions).			
This report contains indication	ns relating to the following items	S:			
☐ Box No. I Basis of the	e opinion				
☐ Box No. II Priority					
☐ Box No. III Non-establ	ishment of opinion with regard to	o novelty, inventive step and industrial applicability			
☐ Box No. IV Lack of uni	ty of invention				
☐ Box No. V Reasoned applicability	statement under Article 35(2) w v; citations and explanations su	rith regard to novelty, inventive step or industrial pporting such statement			
	cuments cited				
☐ Box No. VII Certain def	ects in the international applica	tion			
☐ Box No. VIII Certain obs	servations on the international a	application			
Date of submission of the demand	D	eate of completion of this report			
27.09.2005	2	22.02.2006			
Name and mailing address of the interpreliminary examining authority:	national A	Authorized Officer			
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d		Apostolescu, R			
Fax: +49 89 2399 - 446	т Т	Felephone No. +49 89 2399-7950			

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/052907

_	Box No. I B	Basis of the report	
		o the <b>language</b> , this report is based on the international application in the language in which it was otherwise indicated under this item.	
	☐ This repo	ort is based on translations from the original language into the following language , the language of a translation furnished for the purposes of:	
	□ public	ational search (under Rules 12.3 and 23.1(b)) cation of the international application (under Rule 12.4) cational preliminary examination (under Rules 55.2 and/or 55.3)	
<ol> <li>With regard to the elements* of the international application, this report is based on (replacement sinuscept been furnished to the receiving Office in response to an invitation under Article 14 are referred report as "originally filed" and are not annexed to this report):</li> </ol>			
	Description, F	Pages	
	1-7	as originally filed	
	Claims, Numb	pers	
	1-7	as originally filed	
Drawings, Sheets		eets	
	1/2-2/2	as originally filed	
	□ a seque	nce listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing	
3.	☐ The ame	endments have resulted in the cancellation of:	
		lescription, pages claims, Nos.	
	☐ the d	Irawings, sheets/figs equence listing <i>(specify)</i> :	
	☐ the s	table(s) related to sequence listing (specify):	
4	had not beer	port has been established as if (some of) the amendments annexed to this report and listed below in made, since they have been considered to go beyond the disclosure as filed, as indicated in the all Box (Rule 70.2(c)).	
		description, pages claims, Nos.	
	☐ the c	drawings, sheets/figs	
	⊔ the s □ any	sequence listing (specify): table(s) related to sequence listing (specify):	
	* Tf ite	m 4 applies, some or all of these sheets may be marked "superseded."	

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

_	Box	No. II	Priority
1.	×	prescrib	ort has been established as if no priority had been claimed due to the failure to furnish within the ed time limit the requested:
		□ copy	of the earlier application whose priority has been claimed (Rule 66.7(a)).
		☐ trans	lation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2.		been for	ort has been established as if no priority had been claimed due to the fact that the priority claim has und invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated s considered to be the relevant date.
3.	. Add	ditional ob	oservations, if necessary:

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

1-7 Yes: Claims Novelty (N) Claims No:

Yes: Claims 1-7 Inventive step (IS)

Claims No:

Yes: Claims 1-7 Industrial applicability (IA)

Claims No:

2. Citations and explanations (Rule 70.7):

see separate sheet

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

#### Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: US 2003/101339 A1 (BIANCHINI PAOLO ET AL) 29 May 2003 (2003-05-29)

D2: US 2003/167314 A1 (GILBERT MARTYN ET AL) 4 September 2003 (2003-09-04)

#### Subject-matter:

The present application relates to a system (claim 1) and to a method (claim 4) for enhancing the security of the e-mails transmitted from a sender to a receiver.

#### **Prior art:**

The closest prior art was found in document D1 (see in particular abstract). This document relates to a method and system for transmitting sensitive information over a network.

## Differences (Article 33 (2) PCT):

The difference between the independent claims of the present application and the prior art resides mainly in the specific concepts of the Message Transfer Agent (MTA) splitter and MTA assembly agent.

#### Problem:

The objective problem solved by the above-identified difference is to improve security for e-mail transmissions.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

PCT/EP2004/052907

#### Inventive step (Article 33 (3) PCT):

The independent claims solve a technical problem in a way (MTA splitter divides the e-mail into a plurality of chunks according to a predetermined algorithm and a predetermined list of relay MTAs to which are forwarded said chunks, and the assembly agent reassembled said received chunks using said predetermined algorithm), which is not disclosed or suggested in the prior art (D1 and D2), and therefore they are considered to be inventive.